

## SEQUENCE LISTING

<110> C. Frank Bennett  
Susan M. Freier

<120> ANTISENSE MODULATION OF SHIP-1 EXPRESSION

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<213> Artificial Sequence

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<211> 5273

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&lt;213&gt; Homo sapiens

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&lt;221&gt; CDS

&lt;222&gt; (513)...(4079)

&lt;400&gt; 3

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cgaccagttg ccaggaagga gagggctggc aagaaagccg cggcagccgt ggcagggtgt 240

atgggacggt ggacggccag ggcccccccc tctctctctt tctctctctc tctttgttt 300

ggtttctgtat atgaggaagt tctccgcagc tcagtttcct ttccctcact gagcgcctga 360

aacaggaagt cagttagtta agctggtgcc agcagccgag gccacccaaga ggcaacgggc 420

ggcaggttgc agtggagggg cctccgctcc cctcggtggt gtgtgggtcc tgggggtgcc 480

tgccggccca gccgaggagg cccacgcccc cc atg gtc ccc tgc tgg aac cat 533  
Met Val Pro Cys Trp Asn His

1 5

ggc aac atc acc cgc tcc aag gcg gag gag ctg ctt tcc agg aca ggc 581  
Gly Asn Ile Thr Arg Ser Lys Ala Glu Glu Leu Leu Ser Arg Thr Gly

10 15 20

aag gac ggg agc ttc ctc gtg cgt gcc agc gag tcc atc tcc cgg gca 629  
Lys Asp Gly Ser Phe Leu Val Arg Ala Ser Glu Ser Ile Ser Arg Ala

25 30 35

tac gcg ctc tgc gtg ctg tat cgg aat tgc gtt tac act tac aga att 677  
Tyr Ala Leu Cys Val Leu Tyr Arg Asn Cys Val Tyr Thr Tyr Arg Ile

40 45 50 55

ctg ccc aat gaa gat gat aaa ttc act gtt cag gca tcc gaa ggc gtc 725  
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U.S. PATENT AND TRADEMARK OFFICE  
JULY 1998  
10:00 AM  
EXAMINER: [REDACTED]  
ART UNIT: [REDACTED]

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75	80	85	
aag gaa aac atg ggg ctg gtg acc cat ctg caa tac cct gtg ccg ctg Lys Glu Asn Met Gly Leu Val Thr His Leu Gln Tyr Pro Val Pro Leu			821
90	95	100	
gag gaa gag gac aca ggc gac gac cct gag gag gac aca gaa agt gtc Glu Glu Glu Asp Thr Gly Asp Asp Pro Glu Glu Asp Thr Glu Ser Val			869
105	110	115	
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140	145	150	
acc gag acc agc cgg ccg agc ctc tcc gag aca ttg ttc cag cga ctg Thr Glu Thr Ser Arg Pro Ser Leu Ser Glu Thr Leu Phe Gln Arg Leu			1013
155	160	165	
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170	175	180	
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185	190	195	
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265	270	275	
gcc ttg ctg cac gag ggt cct gag tct ccg cac cgg ccc tcc ctt atc Ala Leu Leu His Glu Gly Pro Glu Ser Pro His Arg Pro Ser Leu Ile			1397
280	285	290	295
cct cca gtc acc ttt gag gtc aag gca gag tct ctg ggg att cct cag Pro Pro Val Thr Phe Glu Val Lys Ala Glu Ser Leu Gly Ile Pro Gln			1445
300	305	310	
aaa atg cag ctc aaa gtc gac gtt gag tct ggg aaa ctg atc att aag Lys Met Gln Leu Lys Val Asp Val Glu Ser Gly Lys Leu Ile Ile Lys			1493
315	320	325	
aag tcc aag gat ggt tct gag gac aag ttc tac agc cac aag aaa atc Lys Ser Lys Asp Gly Ser Glu Asp Lys Phe Tyr Ser His Lys Lys Ile			1541
330	335	340	
ctg cag ctc att aag tca cag aaa ttt ctg aat aag ttg gtg atc ttg Leu Gln Leu Ile Lys Ser Gln Lys Phe Leu Asn Lys Leu Val Ile Leu			1589
345	350	355	
gtg gaa aca gag aag gag aag atc ctg cgg aag gaa tat gtt ttt gct Val Glu Thr Glu Lys Glu Lys Ile Leu Arg Lys Glu Tyr Val Phe Ala			1637
360	365	370	375
gac tcc aaa aag aga gaa ggc ttc tgc cag ctc ctg cag cag atg aag Asp Ser Lys Lys Arg Glu Gly Phe Cys Gln Leu Leu Gln Gln Met Lys			1685
380	385	390	
aac aag cac tca gag cag ccg gag ccc gac atg atc acc atc ttc atc Asn Lys His Ser Glu Gln Pro Glu Pro Asp Met Ile Thr Ile Phe Ile			1733
395	400	405	
ggc acc tgg aac atg ggt aac gcc ccc cct ccc aag aag atc acg tcc Gly Thr Trp Asn Met Gly Asn Ala Pro Pro Lys Lys Ile Thr Ser			1781

410	415	420	
tgg ttt ctc tcc aag ggg cag gga aag acg cg <sup>g</sup> gac gac tct gcg gac Trp Phe Leu Ser Lys Gly Gln Gly Lys Thr Arg Asp Asp Ser Ala Asp			1829
425	430	435	
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440	445	450	455
agt gag aag gag tgg ctg gag atc ctc aaa cac tcc ctg caa gaa atc Ser Glu Lys Glu Trp Leu Glu Ile Leu Lys His Ser Leu Gln Glu Ile			1925
460	465	470	
acc agt gtg act ttt aaa aca gtc gcc atc cac acg ctc tgg aac atc Thr Ser Val Thr Phe Lys Thr Val Ala Ile His Thr Leu Trp Asn Ile			1973
475	480	485	
cgc atc gtg gtg ctg gcc aag cct gag cac gag aac cg <sup>g</sup> atc agc cac Arg Ile Val Val Leu Ala Lys Pro Glu His Glu Asn Arg Ile Ser His			2021
490	495	500	
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505	510	515	
aag gga gcc gtg ggg gtg tcg ttc atg ttc aat gga acc tcc tta ggg Lys Gly Ala Val Gly Val Ser Phe Met Phe Asn Gly Thr Ser Leu Gly			2117
520	525	530	535
ttc gtc aac agc cac ttg act tca gga agt gaa aag aaa ctc agg cga Phe Val Asn Ser His Leu Thr Ser Gly Ser Glu Lys Lys Leu Arg Arg			2165
540	545	550	
aac caa aac tat atg aac att ctc cgg ttc ctg gcc ctg ggc gac aag Asn Gln Asn Tyr Met Asn Ile Leu Arg Phe Leu Ala Leu Gly Asp Lys			2213
555	560	565	
aag ctg agt ccc ttt aac atc act cac cgc ttc acg cac ctc ttc tgg Lys Leu Ser Pro Phe Asn Ile Thr His Arg Phe Thr His Leu Phe Trp			2261
570	575	580	
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585	590	595	
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cac gac cag ctg ctc aca gag agg agg gag cag aag gtc ttc cta cac His Asp Gln Leu Leu Thr Glu Arg Arg Glu Gln Lys Val Phe Leu His 620                       625                       630			
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ccc ctg gtg cac gtg gtg tgt cag tct tat ggc agt acc agc gac atc Pro Leu Val His Val Cys Gln Ser Tyr Gly Ser Thr Ser Asp Ile 680                       685                       690                       695			
atg acg agt gac cac agc cct gtc ttt gcc aca ttt gag gca gga gtc Met Thr Ser Asp His Ser Pro Val Phe Ala Thr Phe Glu Ala Gly Val 700                       705                       710			
act tcc cag ttt gtc tcc aag aac ggt ccc ggg act gtt gac agc caa Thr Ser Gln Phe Val Ser Lys Asn Gly Pro Gly Thr Val Asp Ser Gln 715                       720                       725			
gga cag att gag ttt ctc agg tgc tat gcc aca ttg aag acc aag tcc Gly Gln Ile Glu Phe Leu Arg Cys Tyr Ala Thr Leu Lys Thr Lys Ser 730                       735                       740			
cag acc aaa ttc tac ctg gag ttc cac tcg agc tgc ttg gag agt ttt Gln Thr Lys Phe Tyr Leu Glu Phe His Ser Ser Cys Leu Glu Ser Phe 745                       750                       755			
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760	765	770	775	
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780		785		790
gac cct gag tac ctg cta gac cag cac atc ctc atc agc atc aag tcc Asp Pro Glu Tyr Leu Leu Asp Gln His Ile Leu Ile Ser Ile Lys Ser				2933
795	800		805	
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810	815		820	
gag gcc aca gaa acg cag ctg ccc atc tac acg cct ctc acc cac cat Glu Ala Thr Glu Thr Gln Leu Pro Ile Tyr Thr Pro Leu Thr His His				3029
825	830		835	
ggg gag ttg aca ggc cac ttc cag ggg gag atc aag ctg cag acc tct Gly Glu Leu Thr Gly His Phe Gln Gly Glu Ile Lys Leu Gln Thr Ser				3077
840	845	850		855
cag ggc aag acg agg gag aag ctc tat gac ttt gtg aag acg gag cgt Gln Gly Lys Thr Arg Glu Lys Leu Tyr Asp Phe Val Lys Thr Glu Arg				3125
860		865		870
gat gaa tcc agt ggg cca aag acc ctg aag agc ctc acc agc cac gac Asp Glu Ser Ser Gly Pro Lys Thr Leu Lys Ser Leu Thr Ser His Asp				3173
875	880		885	
ccc atg aag cag tgg gaa gtc act agc agg gcc cct ccg tgc agt ggc Pro Met Lys Gln Trp Glu Val Thr Ser Arg Ala Pro Pro Cys Ser Gly				3221
890	895		900	
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905	910		915	
ttt ggg cca cca atg ccc ctg cac gtg aag cag acc ttg tcc cct gac Phe Gly Pro Pro Met Pro Leu His Val Lys Gln Thr Leu Ser Pro Asp				3317
920	925	930		935
cag cag ccc aca gcc tgg agc tac gac cag ccg ccc aag gac tcc ccg Gln Gln Pro Thr Ala Trp Ser Tyr Asp Gln Pro Pro Lys Asp Ser Pro				3365

940	945	950	
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955	960	965	
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970	975	980	
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1160	1165	1170	1175
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1180	1185		
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<210> 33  
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&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 33

accatccttg gacttcttaa

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&lt;210&gt; 34

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 34

ctcagaacca tccttggact

20

&lt;210&gt; 35

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 35

ttgtcctcag aaccatcctt

20

&lt;210&gt; 36

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

<400> 36

agaacttgtc ctcagaacca

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<210> 37

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 37

gctgtagaac ttgtcctcag

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<210> 38

<211> 20

<212> DNA

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<220>

<223> Antisense Oligonucleotide

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<210> 39

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<210> 40

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agcaaaaaca tattccttcc

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<210> 41  
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<210> 42  
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<212> DNA  
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<400> 42  
ttcttcatct gctgcaggag

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<210> 43  
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<400> 43

gacgtgatct tcttgggagg

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<210> 44

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<212> DNA

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<223> Antisense Oligonucleotide

<400> 44

accaggacgt gatcttcttg

20

<210> 45

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 45

gagaaaaccag gacgtgatct

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<210> 46

<211> 20

<212> DNA

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ttggagagaa accaggacgt

20

<210> 47  
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<400> 47  
gcccccttggaa gagaaccagg

20

<210> 48  
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20

<210> 49  
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<400> 49  
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20

<210> 50  
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<400> 50

atgcctgtct tcacgttgtc

20

<210> 51

<211> 20

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<220>

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<400> 51

aagtggctgt tgacgaaccc

20

<210> 52

<211> 20

<212> DNA

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<400> 52

aagtcaagtg gctgttgacg

20

<210> 53

<211> 20

<212> DNA

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<400> 53

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<210> 54

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<223> Antisense Oligonucleotide

<400> 54

gacttccaga ggactcggtc

20

<210> 55

<211> 20

<212> DNA

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<400> 55

tggtcactcg tcatgatgtc

20

<210> 56

<211> 20

<212> DNA

<213> Artificial Sequence

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gggctgttgt cactcgtcat

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<210> 57  
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<400> 57  
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<210> 58  
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<400> 58  
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<210> 59  
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<400> 59  
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<210> 60  
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&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 60

tctccttcct gactcttgac

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&lt;210&gt; 61

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 61

ccccatggtg ggtgagaggc

20

&lt;210&gt; 62

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 62

agtcatagag cttctccctc

20

&lt;210&gt; 63

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 63

cacaaaagtca tagagttct

20

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<400> 64  
gtcttcacaa agtcatagag

20

<210> 65  
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20

<210> 66  
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<210> 67  
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<223> Antisense Oligonucleotide

<400> 67

cactgcatgg cagtcctgcc

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<210> 68

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ctgagggctt cactgcatgg

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<210> 69

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<210> 70

<211> 20

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<400> 70

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<210> 71

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<400> 71

taggcccttt cctgaaaaca

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<210> 72

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<400> 72

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<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 73

atatgacgaa tgttcgtaaa

20

<210> 74  
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<212> DNA  
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<220>

<223> Antisense Oligonucleotide

<400> 74  
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<210> 75  
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<212> DNA  
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<400> 75  
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<210> 76  
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<223> Antisense Oligonucleotide

<400> 76  
ctaaaggcgc ttgtgtcact

20

<210> 77  
<211> 20  
<212> DNA  
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&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 77

actgagaagc caggttagatc

20

&lt;210&gt; 78

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 78

cttggcatct ctagcccaag

20

&lt;210&gt; 79

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 79

gctggtgatg gctgcccacc

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&lt;210&gt; 80

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

<400> 80  
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<210> 81  
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<220>

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<400> 81  
agcaacacgca aagactcttc 20

<210> 82  
<211> 20  
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<400> 82  
cagccaggct ggagagcacg 20

<210> 83  
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<212> DNA  
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<223> Antisense Oligonucleotide

<400> 83  
aagaggccca ccctccctgg 20

<210> 84

<211> 20  
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<220>

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<400> 84  
agacatcacc catctattct

20

<210> 85  
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<223> Antisense Oligonucleotide

<400> 85  
tcacacacac cactggattt

20

<210> 86  
<211> 20  
<212> DNA  
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<220>

<223> Antisense Oligonucleotide

<400> 86  
tggttacgca gacttccatc

20

<210> 87  
<211> 20  
<212> DNA  
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<220>

<223> Antisense Oligonucleotide

<400> 87

ggcacaattt attggttacg

20